SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Cupp, Mary S.
Cupp, Eddie W.

(ii) TITLE OF INVENTION: ANTITHROMBIN PROTEIN AND DNA SEQUENCES

(iii) NUMBER OF SEQUENCES: 2

(iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: W. Murray Spruill (Alston & Bird, LLP)
(B) STREET: 3605 Glenwood Ave. Suite 310
(C) CITY: Raleigh
(D) STATE: NC
(E) COUNTRY: USA
(F) ZIP: 27622

(v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: Floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: PatentIn Release #1.0, Version #1.30

(vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER:
(B) FILING DATE:
(C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:
(A) NAME: Spruill, W. Murray
(B) REGISTRATION NUMBER: 32,943
(C) REFERENCE/DOCKET NUMBER: 5721-5

(ix) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: 919 420 2202
(B) TELEFAX: 919 881 3175

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 532 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(vi) ORIGINAL SOURCE:
(A) ORGANISM: Simulium vittatum

(ix) FEATURE:
(A) NAME/KEY: CDS
(B) LOCATION: 1..294

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

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GAG GTG GCG AAT TTG CAG GAC CAT CGA GCT GTT GAA TTT GTG TGC GAG      48
Glu Val Ala Asn Leu Gln Asp His Arg Ala Val Glu Phe Val Cys Glu
  1               5                  10                  15

AAG GAT ACT GAA AAC CAG CAT GGT TCC GAT TGC CTG CTT TCT TGT GAC      96
Lys Asp Thr Glu Asn Gln His Gly Ser Asp Cys Leu Leu Ser Cys Asp
             20                  25                  30

GTG ATG TTC TGG GAT ACC AAA AAC GAG AAC AAC AAG GAA TAT GAA GAC     144
Val Met Phe Trp Asp Thr Lys Asn Glu Asn Asn Lys Glu Tyr Glu Asp
         35                  40                  45

AGA TAC AAT TTG TGC AAA CAT TCA GCC GCT TCC GAA GAG AAC ATT TGT     192
Arg Tyr Asn Leu Cys Lys His Ser Ala Ala Ser Glu Glu Asn Ile Cys
     50                  55                  60

GAT CGC AAT GAA GAA TTG AGA GCC TGT TTC TTG CAT GAT TCG TCA TAC     240
Asp Arg Asn Glu Glu Leu Arg Ala Cys Phe Leu His Asp Ser Ser Tyr
 65                  70                  75                  80

GAA GAG ACT TCG GAC GAA TAT GAA ATA ACC TAC AGC ATG GAT TCC CTG     288
Glu Glu Thr Ser Asp Glu Tyr Glu Ile Thr Tyr Ser Met Asp Ser Leu
                 85                  90                  95

TGA TGA TCAAACATTG GTAATAGTTC AATTGATCGA AATATGCAGA AACCGTCCAC      344
 *   *

GGTAGTGTAA TTATAACCCA TGTTGTTCGC ATTGTACTCT AATTCTACTC CGTTCATATA  404

TGGCTGATGA GTGCCATCCA GCCAATGTGA AACAGGAGTA TAAAAAGCAC AATGTGGGTG  464

ACAGTCCCAT TCACACAATA TGCAAATAAA ATAATGGAAA TGACCCCAAA AAAAAAAAAA  524

AAAAAAAA                                                          532
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(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 98 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: protein

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

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Glu Val Ala Asn Leu Gln Asp His Arg Ala Val Glu Phe Val Cys Glu
  1               5                  10                  15

Lys Asp Thr Glu Asn Gln His Gly Ser Asp Cys Leu Leu Ser Cys Asp
             20                  25                  30
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Val Met Phe Trp Asp Thr Lys Asn Glu Asn Asn Lys Glu Tyr Glu Asp
         35                  40                  45

Arg Tyr Asn Leu Cys Lys His Ser Ala Ala Ser Glu Glu Asn Ile Cys
     50                  55                  60

Asp Arg Asn Glu Glu Leu Arg Ala Cys Phe Leu His Asp Ser Ser Tyr
 65                  70                  75                  80

Glu Glu Thr Ser Asp Glu Tyr Glu Ile Thr Tyr Ser Met Asp Ser Leu
                 85                  90                  95

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